

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-43 (Previously Canceled)

44. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a radio frequency base transmitter and a radio frequency base receiver and plural remote control units operable to communicate with said controller, each of said remote control units including a radio frequency remote transmitter and a radio frequency remote receiver, said method comprising the steps of:

causing said base transmitter to transmit a radio frequency search signal to said remote receivers of said plural remote control units;

causing said control circuit to effect one of opening and closing said barrier depending on whether or not said base receiver receives an acknowledgment signal transmitted from at least one of said remote transmitters in response to said radio frequency search signal;

making determinations whether individual ones of said plural remote control units are within a radio frequency communication range of said controller, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal; [[and]]

causing said barrier to move from a closed position to an open position in response to an acknowledgement signal from any one of said remote transmitters and ~~remain remaining~~ in an open position automatically as long as any one, but not all, of said remote control units is within the ~~within a~~ radio frequency communication range of said controller; and

causing said barrier to move from an open position to a closed position and maintain said barrier in the closed position automatically in response to determining that all of said remote control units have returned to the radio frequency communication range of said controller.

45. (Previously Canceled)

46. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller by way of said base receiver, each of said remote control units including a radio frequency remote transmitter and a radio frequency remote receiver, said method comprising the steps of:

causing said base transmitter to transmit a radio frequency search signal to said remote receivers of said plural remote control units;

causing said controller to effect one of opening and closing said barrier dependent on said base receiver receiving an acknowledgement signal transmitted from a remote transmitter of one of said plural remote control units in response to said radio frequency search signal;

actuating said base switch to effect closing of said barrier;

making determinations whether individual ones of said plural remote control units are within a signal receiving range of said radio frequency search signal from said base transmitter, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal;

causing said controller to make a determination that ~~determine~~ if all of said remote control units are within a range of said controller effective to receive acknowledgement signals from all of said remote transmitters; and

causing said base transmitter to cease transmitting radio frequency search signals to said remote receivers automatically in response to said determination that ~~determining~~ if all of said remote control units are within said range.

47. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller by way of said base receiver, each of said remote control units including a radio frequency remote transmitter and a radio frequency remote receiver, said method comprising the steps of:

causing said base transmitter to transmit a radio frequency search signal to said remote receivers of said plural remote control units;

causing said controller to effect one of opening and closing said barrier dependent on said base receiver receiving an acknowledgement signal transmitted from a remote transmitter of one of said plural remote control units in response to said radio frequency search signal;

causing said controller to effect closing of said barrier;

making determinations whether individual ones of said plural remote control units are within a signal receiving range of said radio frequency search signal from said base transmitter, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal; and

ceasing transmission of radio frequency search signals from said base transmitter automatically in response to said base receiver receiving an acknowledgement signal from all of said remote control units.

48. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller by way of said base receiver, each of said remote control units including a radio frequency remote transmitter and a radio frequency remote receiver, said method comprising the steps of:

causing said base transmitter to transmit a radio frequency search signal to said remote receivers of said plural remote control units;

actuating said base switch to effect opening of said barrier;

making determinations whether individual ones of said plural remote control units are within a signal receiving range of said radio frequency search signal from said base transmitter, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal; and

causing said controller to maintain said barrier in an open condition automatically in response to ~~as long as~~ said base receiver receiving ~~receives~~ an acknowledgement signal transmitted from at least one, but not every, remote transmitter of said plural remote control units in response to said radio frequency search signal.

49. (Previously Canceled)

50. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller, each of said remote control units including a radio frequency remote transmitter and a radio frequency remote receiver, said method comprising the steps of:

causing said base transmitter to transmit a radio frequency search signal to said remote receivers of said plural remote control units;

causing said controller to open said barrier;

making determinations whether individual ones of said plural remote control units are within a signal receiving range of said radio frequency search signal from said base transmitter, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal; and

causing said controller to maintain said barrier in an open position automatically if one of said remote control units is in said signal receiving range and another one of said remote control units is out of said signal receiving range, and to move said barrier to a closed position and maintain said barrier in the closed position automatically if all of said remote control units are in said signal receiving range.

51. (Currently Amended) The method set forth in Claim 50 including the step of:

causing said controller to close said barrier and maintain said barrier in a closed position automatically if all of said remote control units cease ~~said one remote control unit ceases to~~ be in said signal receiving range of said radio frequency search signal from said base transmitter.

52. (Previously Canceled)

53. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller, each of said remote control units including a radio frequency remote transmitter, a radio frequency remote receiver and a switch operable to cause said remote transmitter to transmit a signal to said base receiver, said method comprising the steps of:

actuating one of said switches to cause said operator system to close said barrier;

causing said base transmitter to transmit a radio frequency search signal to said remote receivers;

transmitting an acknowledgement signal from any of said remote control units which has received said radio frequency search signal from said base transmitter;

sending an additional signal from said base transmitter to said any one remote control unit to cause a remote transmitter associated with said any one remote control unit to cease responding to said radio frequency search signal from said base transmitter even in presence of said radio frequency search signal;

causing said base transmitter to continue to send periodically said radio frequency search signal searching for any of said remote units which has not responded to said radio frequency search signal from said base transmitter; and

causing said operator system to move said barrier to an open position in response to receiving an acknowledgement signal by said base receiver transmitted, in response to receipt of said search signal, from a remote transmitter which has moved

into range of said radio frequency search signal between said base transmitter and said remote transmitter which has moved into said range.

54. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio frequency base receiver and plural remote control units operable to communicate with said controller, each of said remote control units including a radio frequency remote transmitter, a radio frequency remote receiver and a switch operable to cause said remote transmitter to transmit a signal to said base receiver, said method comprising the steps of:

actuating said base switch to cause said operator to open said barrier;

causing said base transmitter to emit search signals in response to actuating said base switch to search for said remote control units; and

causing said barrier to remain in an open position automatically in response to as long as said base receiver receiving receives an acknowledgement signal transmitted from at least one but not all of said remote control units in response to said search signals from said base transmitter.

55. (Currently Amended) A method for operating a barrier consisting of at least one of a gate or garage door, to move between open and closed positions, said barrier being operably connected to an operator system including a controller comprising a base control circuit, a human operator controllable base switch operably connected to said base control circuit, a radio frequency base transmitter, and a radio

frequency base receiver and plural remote control units operable to communicate with said controller, each of said remote control units including a radio frequency remote transmitter, a radio frequency remote receiver and a switch operable to cause said remote transmitter to transmit a signal to said base receiver, said method comprising the steps of:

actuating one of said switches to cause said operator system to open said barrier;

causing said base transmitter to emit a search signal in response to actuating said one switch to search for said remote control units; and

causing said barrier to remain in an open position automatically as long as said base receiver fails to receive an acknowledgment signal transmitted from one of said remote control units in response to said search signal from said base transmitter.

56. (Previously Canceled)

57. (Currently Amended) The method of claim 54~~claim 44~~, further comprising:

returning the barrier from the open position to the closed position upon one of said remote transmitters leaving the radio frequency communication range of said controller;

sending an additional signal from said base transmitter to another of said remote transmitters to cease responding to said radio frequency search signal from said base transmitter even in presence of said radio frequency search signal; and

causing said base transmitter to continue to transmit said radio frequency search signal while causing said control circuit to ~~maintain~~ maintaining the barrier in the closed position automatically even though ~~the other~~ another of the remote transmitters remained within said radio frequency communication range of said controller.

58. (Previously Presented) The method of claim 54, further comprising:

closing the barrier upon detecting one of said remote control units leaving a radio frequency communication range of said base receiver;

making determinations whether individual ones of said plural remote control units are within a signal receiving range of said radio frequency search signal from said base transmitter, wherein said determinations are made in response to receipt of acknowledgement signals transmitted from said remote transmitters of said plural remote control units, and said acknowledgement signals are transmitted in response to said radio frequency search signal; and

closing the barrier and maintaining the barrier in a closed position automatically upon determining that all of said plural remote control units have returned to said signal receiving range.

~~causing said base transmitter to continue to emit the search signals while causing said control circuit to maintain the barrier in the closed position even though another of said remote control units remained within said radio frequency communication range of said base receiver.~~